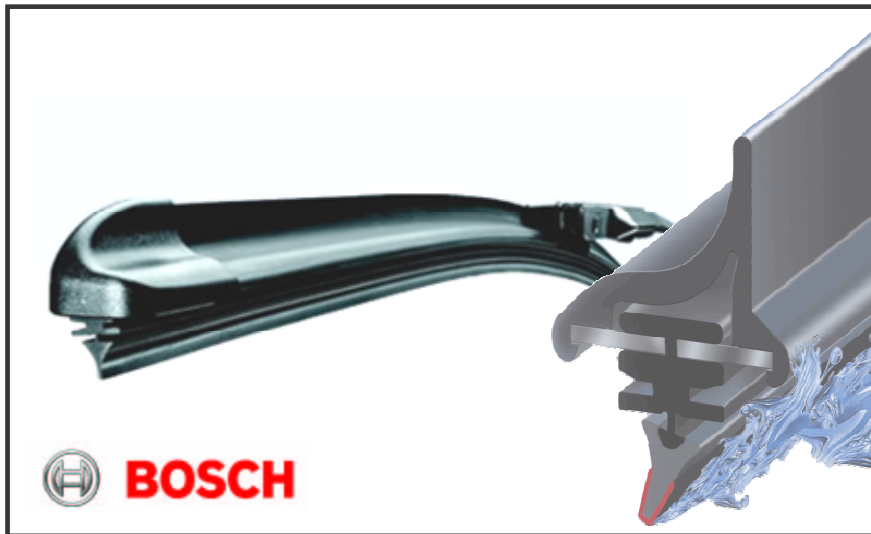


**Praktikum / Diplomarbeit:**

**Company:** Robert Bosch Produktie N.V., Tienen, Belgium

**Department:** EAB4, advanced development / calculation / simulation wiper blade

**Description of the company:** the name Robert Bosch stands world-wide for innovation and quality. With about 195.000 associates we are represented in more than 140 countries world-wide. In our location in Tienen/Belgium we develop and manufacture Bosch wiper systems. Tienen/Belgium is the biggest wiper production site world-wide (> 300.000 / day).

**Subject of the internship:** Wiper blade Flip-Over Noise

**Duration:** 6 months

**Start Date:** as soon as possible

**Goal:**

- Find the basic physical mechanisms and noise related most important parameters behind flip-over noise of a wiper blade
  - Dynamic 2D simulation in Abaqus of flip-over behaviour of a wiper profile in contact with a windscreen to determine contact forces and FFT analysis
  - Modal analysis of a windscreen
  - Application of contact forces on flexible screen and FFT analysis
  - Experimental activity (acceleration and noise measurements)
  - Correlation simulation to experimental results
  - Sensitivity study to identify critical noise-related parameters

**Required skills:**

- Last year Master degree mechanical engineering / physics
- Analytical skills / Good knowledge of FEM method. Basic knowledge of Abaqus preferred.
- Knowledge of NVH is an advantage.
- Ability to work independently and good communication skills
- Proficient English (written and spoken), German is a plus.
- Applicant having a EU-country nationality

**Contact:**

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